



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,794	02/08/2001	Hiroshi Isono	108482	3978

25944 7590 02/19/2002

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
----------	--------------

3613

DATE MAILED: 02/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/778,794

Applicant(s)

ISONO ET AL.

Examiner

Melody M. Burch

Art Unit

3613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-910) (Paper Note)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

2. The drawings are objected to because

- Several of the labels in figures 1-14 are presented in Japanese.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show

- the return spring, output member, input member, and the pressure piston as described in the specification on pg. 13;
- the stopper and the rear pressure piston as described in the specification on pg. 15;

- ✓ - Labels PM0 and PM2 as described in the specification on pg. 13 and pg. 14 referring to figure 9.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 3613

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

- the two pressure chambers claimed in line 2 of claim 7;
- the pressure Pth2 being greater than Pth1 as claimed in claim 2 lines 5-6 (in the y-axis of figure 9 the graph shows Pth1 being greater than Pth2;
- the reservoir tank being larger than the pressure chamber of the master cylinder as claimed in lines 5-6 from the bottom of claim 8;

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: labels FL and FR described on pg. 4 and labels f and G described on pg. 9.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### **Specification**

6. The disclosure is objected to because of the following informalities:

- In line 8 of pg. 4 "12" should be changed to --12b--;

Art Unit: 3613

- In line 30 of pg. 15 --of Figure 12-- should be included after "As shown in (a)";
- In line 31 of pg. 15 and throughout the specification the use of numbers "(1) – (3)" should be replaced with what the numbers represent;
- In line 15 of pg. 20 "S53" should be changed to --S51-- .

Appropriate correction is required.

### ***Claim Objections***

7. Claims 2-8, 10-15, and 17-18 are objected to because of the following informalities:

- In line 1 of the claims "A brake device" should be changed to --The brake device--;
- Claim 3 is objected to as it includes numbers that do not represent the element numbers;
- Claim 7 recites that "the fluid pressure source device is a master cylinder" while claim 3 already claimed that "the fluid pressure source device includes a master cylinder..." This example includes but is not limited to claim 7.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 2-8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation of a "first predetermined amount of operation" claimed claims 2, 6, 12 is unclear in view of the specification. On pg. 13 lines 11-12 label F0 is described as the first predetermined operation power. Then on pg. 14 lines 15-16 label F1 is described as the first predetermined operation power. Labels F0 and F1 represent two different amounts as evidenced by the graph of figure 9.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claims 1, 9, and 16. The phrase "distinctively of the brake device" as first claimed in lines 8-9 of claim 1 is unclear. Examiner maintains that it is unclear to one of ordinary skill in the brake art what is meant by detecting types of failures "distinctively of the brake device. Clarification is required.

Re: claim 1. Claim 1 recites the limitation "the brake operation " in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Re: claim 1. Claim 1 recites the limitation "the fluid pressure source" in

line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Re: claim 2. Claim 2 recites the limitations "the second predetermined pressure" in line 5, "the first predetermined pressure" in line 6, "the pressure" in line 6, "the brake operation" in line 8, "the brake **operation** amount detector" in line 9. There is insufficient antecedent basis for these limitations in the claim.

Re: claim 2. The phrase "and if the pressure detected...than the first predetermined pressure" in lines 1-4 from the bottom of the claim is indefinite. It is unclear to the Examiner whether this phrase is directed to another case.

Re: claim 3. Claim 3 recites the limitations "the input power" in line 3, "the operation power" in line 3, "the fluid leakage" in line 11. There is insufficient antecedent basis for these limitations in the claim.

Re: claim 5. Claim 5 recites the limitation "the predetermined gradient" in the last line of the claim. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 6. Claim 6 recites the limitations "the brake fluid pressure" in line 2, "the master pressure" in line 6 from the bottom of the claim, "the supplying amount", "the fluid", and "the brake" in line 3 from the bottom of the claim, "the large amount fluid leakage failure" in the last line of the claim. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 6. The phrase "in a different way" in line 2 is unclear. The Examiner is forced to ask "In a different way from what?" when reading the claim limitation.

Clarification is required.

Re: claims 6 and 12. The phrase "a supplying amount" in line 2 from the bottom of the claim is indefinite. It is unclear to the Examiner whether the "supplying amount" in line 2 from the bottom of the claim is the same or different from the "supplying amount" claimed in line 3 from the bottom of the claim.

Re: claim 7. The phrase "and includes a front side brake" in line 4 is indefinite. It is unclear whether the brake device or the fluid pressure source device "includes a front side brake...". Clarification is required.

Re: claim 7. Claim 7 recites the limitation "the pressure chamber of the master cylinder" in lines 1-2 from the bottom. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 8. The phrase "a brake fluid control" is indefinite. It is unclear whether the brake fluid control of claim 8 is different or the same as that claimed in claim 6.

Re: claim 8. The phrase "a pressure chamber" is indefinite. It is unclear whether the pressure chamber of claim 8 is different or the same as that claimed in claim 7.

Re: claim 8. The phrase "in a different way" in line 2 is unclear. The Examiner is forced to ask "In a different way from what?" when reading the claim limitation. Clarification is required.

Re: claim 8. The phrase "a reservoir tank which is larger than the pressure chamber in line 6 from the bottom is indefinite. It is unclear whether the tank or the compressing device is larger than the pressure chamber of the master cylinder.

Re: claim 8. Claim 8 recites the limitation "the type of the failure" in the last line of the bottom. There is insufficient antecedent basis for the limitation in the claim.



Re: claim 9. Claim 9 recites the limitations "the type of the failure" in the last line of the bottom, "the amount ", "the brake operation" in line 4 from the bottom. There is insufficient antecedent basis for the limitations in the claim.

Re: claim 9. The phrase "in a different way" in line 2 from the bottom is unclear. The Examiner is forced to ask "In a different way from what?" when reading the claim limitation. Clarification is required.

Re: claim 10. Claim 10 recites the limitation "the input power" in lines 2-3. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 11. Claim 11 recites the limitation "the operation power" in line 5, "the predetermined gradient" in the last line of the claim. There is insufficient antecedent basis for the limitations in the claim.

Re: claim 12. Claim 12 recites the limitation "the master pressure" in line 6 from the bottom, "the brake" in line 3 from the bottom. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 12. The phrase "a small amount fluid leakage failure" in line 2 from the bottom of the claim is indefinite. It is unclear to the Examiner whether it is the same or different from the small amount fluid leakage failure claimed earlier in the claim.

Re: claims 13 and 15. The phrase "a reservoir tank which is larger than the pressure chamber in lines 5-6 from the bottom is indefinite. It is unclear whether the tank or the compressing device is larger than the pressure chamber of the master cylinder.

Re: claim 14. The phrase "the front side brake" in line 3 is indefinite. It is unclear to the Examiner whether it is the same or different from the small amount fluid leakage failure claimed earlier in the claim and the phrase "the pressure chamber of the master cylinder" in the last line of the claim is unclear.

Re: claim 16. Claim 16 recites the limitation "the brake operation" in line 5 from the bottom, "the brake" in line 3 from the bottom. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 17. Claim 17 recites the limitation "the operation power" in line 2 from the bottom. There is insufficient antecedent basis for the limitation in the claim.

Re: claim 18. Claim 18 recites the limitation "the input power" in line 2, "the pressure chamber of the master cylinder" in the last line of the claim. There is insufficient antecedent basis for the limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent JP-10147236 to Yamada et al. (corresponding to 6109879 as an English equivalent). Yamada et al. disclose a brake device having a fluid pressure source device MC shown in figure 2 which generates a fluid pressure based on

Art Unit: 3613

operation of a brake operating member BP shown in figure 2, the brake device actuated by the fluid pressure generated by the fluid pressure source, comprising: a brake operating amount detector BS which detects an operating amount of the brake operating member, a fluid source pressure detector PH which detects the pressure generated in the fluid pressure source device, and a failure detector shown in figure 3 steps C, D, E F(G PI, J) and in figure 5 which detects types of failures distinctively of the brake device based on the pressure detected by the fluid source pressure detector and the amount of the brake operation detected by the brake operating amount detector, a brake fluid control device or motor M and valves PC1-8 which controls the brake fluid pressure in a different way (with respect to the motor stopping control) based on the type of the failure detected by the failure detector.

14. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent JP-11278238. JP-11278238 shows in figure 1 a brake device having a fluid pressure source device 2 which generates a fluid pressure based on operation of a brake operating member 1, the brake device actuated by the fluid pressure generated by the fluid pressure source, comprising: a brake operating amount detector 13 which detects an operating amount of the brake operating member, a fluid source pressure detector 14 which detects the pressure generated in the fluid pressure source device, and a failure detector or leakage detection device disclosed in line 7 from the bottom of the abstract which detects types of failures distinctively of the brake device based on the pressure detected by the fluid source pressure detector and the amount of the brake operation detected by the brake operating amount detector, a brake fluid

control device 10 and valves 5,6 which controls the brake fluid pressure in a different way (with respect to the amount of leakage) based on the type of the failure detected by the failure detector.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 10, 11, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Maehara et al. Yamada et al. disclose a brake device having a fluid pressure source device MC shown in figure 2 which generates a fluid pressure based on operation of a brake operating member BP shown in figure 2, the brake device actuated by the fluid pressure generated by the fluid pressure source, comprising: a brake operating amount detector BS which detects an operating amount of the brake operating member, a fluid source pressure detector PH which detects the pressure generated in the fluid pressure source device, and a failure detector shown in figure 3 steps C, D, E F G PI, J and in figure 5 which detects types of failures distinctively of the brake device based on the pressure detected by the fluid source pressure detector and the amount of the brake operation detected by the brake operating amount detector.

Art Unit: 3613

Maehara et al. teach in col. 5 lines 28-32 the use of a bottoming detector 55. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the failure detector of Yamada et al. to have included a bottoming detector, as taught by Maehara et al., in order to provide a means of detecting a bottoming condition to indicate an excessive stroke of movement of the brake operating member.

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Maehara et al. as applied to claim 10 above, and further in view of Japanese Patent JP-11278238. JP-11278238 teaches in line 7 of the abstract the use of a leakage detecting device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the failure detector of Yamada et al., as modified, to have included a leakage detecting device, as taught by JP-11278238, in order to detect small and large leakage failures associated with the brake device.

***Allowable Subject Matter***

18. Claims 2-8, 13, and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and first paragraph (claims 2-8) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 3613

**Conclusion**

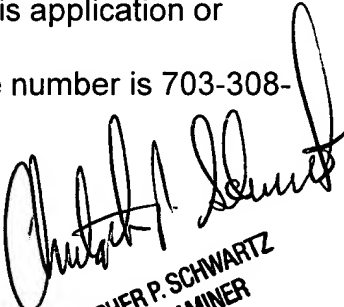
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 3936095 to Every and 5934880 to Yamada et al. teach the use of detecting pressure levels to detect failure in a brake device, 6007163 to Sawada teaches the use of more than one path connected to the suction side of pump 39.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb 2/11/02  
mmb  
February 11, 2002

  
CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER